

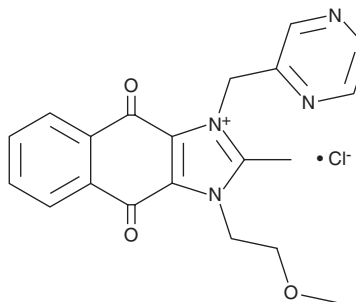
PRODUCT INFORMATION



YM-155 (chloride)

Item No. 36827

CAS Registry No.: 355406-09-6
Formal Name: 4,9-dihydro-3-(2-methoxyethyl)-2-methyl-4,9-dioxo-1-(2-pyrazinylmethyl)-1H-naphth[2,3-d]imidazolium, monochloride
MF: C₂₀H₁₉N₄O₃ • Cl
FW: 398.8
Purity: ≥98%
UV/Vis.: λ_{max}: 245, 252, 272 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

YM-155 (chloride) is supplied as a solid. Aqueous solutions of YM-155 (chloride) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of YM-155 (chloride) in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

YM-155 is a survivin inhibitor.¹ It inhibits survivin promoter activity in a reporter assay (IC₅₀ = 0.54 nM). YM-155 (10-1,000 nM) reduces survivin levels and induces apoptosis in PC3 and PPC-1 prostate cancer cells. *In vivo*, YM-155 (3 and 10 mg/kg) inhibits tumor growth, decreases intratumor survivin levels, and induces tumor regression in a PC3 mouse xenograft model. It reduces tumor volume in a MiaPaCa-2 pancreatic cancer mouse xenograft model.² YM-155 also inhibits severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) papain-like protease (PL^{pro}; IC₅₀ = 2.47 μM) and reduces the number of viral RNA copies in SARS-CoV-2-infected Vero E6 cells.³

References

1. Nakahara, T., Takeuchi, M., Kinoyama, I., *et al.* YM155, a novel small-molecule survivin suppressant, induces regression of established human hormone-refractory prostate tumor xenografts. *Cancer Res.* **67(17)**, 8014-8021 (2007).
2. Na, Y.S., Yang, S.J., Kim, S.M., *et al.* YM155 induces EGFR suppression in pancreatic cancer cells. *PLoS One* **7(6)**, (2012).
3. Zhao, Y., Du, X., Duan, Y., *et al.* High-throughput screening identifies established drugs as SARS-CoV-2 PL^{pro} inhibitors. *Protein Cell* **12(11)**, 877-888 (2021).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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